

**Quapaw Tribe of Oklahoma  
CERCLA, Section 104**

**Grant Application for**

**Remedial Response Cooperative Agreement  
10/1/2012 through 9/30/2014**

**(Revised 10/8/13)**

Submitted to the

**U.S. Environmental Protection Agency, Region VI**  
Dallas, Texas

Prepared by the

**Quapaw Tribe of Oklahoma  
Environmental Office P.O.  
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## **I. INTRODUCTION**

### **A. Request for Funding**

The Quapaw Tribe Environmental Office (QTEO) is requesting financial assistance from the U.S. Environmental Protection Agency (EPA) to fund the remediation of a parcel of tribal trust land (commonly known as the Catholic 40) for a two (2) year period between October 1, 2012 and September 30, 2014 in Federal Fiscal Years (FFY) 2012 through FFY2014 (FFY12/14). This request is made pursuant to the provisions of the Comprehensive Environmental Response, Compensation and Liability Acts as amended, 42 United States Code (U.S.C.) §9601 to 9675 (CERCLA). This cooperative agreement contributes to the attainment of environmental results under Compass Program Results Code (PRC) 303DD2 as noted in EPA's Strategic Plan, Goal 3, Objective 3.2, Subjective 3.3.3, Annual Performance Goal 3.3: Assess and Clean Up Contaminated Land, by enabling Tribes to lead or participate in Superfund cleanups, and to consult with EPA before, during, or after Superfund Cleanup activities as provided in CERCLA §121(f).

The QTEO funding request for \$2,635,882 will allow for the remediation of the Catholic 40 in a manner consistent with EPA's Record of Decision (ROD) for Operable Unit No. 4 (OU4) at the Tar Creek Superfund Site. This funding request has been prepared in accordance with 40 CFR Part 35 Subpart O, Sections 36.6100 through 36.6120.

### **B. Background**

Through the EPA Region VI General Assistance Program (GAP), the Quapaw Tribe Environmental Office was established on October 1, 1997. In June of 1998, the Quapaw Tribal Chairman and the EPA Region VI Administrator signed a Tribal Environmental Agreement (TEA), which established a formal agreement between the Tribe and the EPA to address the issues raised regarding the environmental protection of the Quapaw Tribal land including without limitation land known as the Catholic 40. As a result of that process, the Tribal Environmental Office is working toward the remediation of Tribal land on the Tar Creek Superfund Site in such a manner which protects human health, the environment, and the cultural heritage of the Quapaw people.

The Quapaw Tribe is currently administering an EPA Superfund management assistance grant under an existing Superfund support agency cooperative agreement. The Tribe entered into this support agency cooperative agreement with EPA Region 6 in 2001. This management assistance grant has enabled the Tribe to provide 'meaningful and substantial involvement' in the decisions related to the development and implementation of the OU4 ROD. Working together with EPA and other stakeholders on Tar Creek issues over the past 12 years has enabled the QTEO to develop the technical capacity required to administer a remedial response cooperative agreement.

The following personnel are employed by the QTEO (see Organizational Chart in Appendix A):

- Environmental Director – Tim Kent, PG
- Environmental Engineer – Craig Kreman

- Environmental Grants Manager – Ardie Blair
- Environmental Specialist – Susie Attocknie
- Environmental Technician- Cathy Sloan

## **II. PROJECT NARRATIVE**

### **A. Site Description**

The Tar Creek Superfund Site is a former lead and zinc mining area in Ottawa County, Oklahoma, located within the Oklahoma portion of the Tri-State Mining District, which covers parts of Oklahoma, Kansas, and Missouri. The Tar Creek Superfund Site includes an area (approximately 40 square miles) in northern Ottawa County where lead and zinc mining operations were conducted and any area where a hazardous substance from mining or milling in Ottawa County has been stored or disposed. The Tar Creek Superfund Site also includes all suitable areas in close proximity to the contamination necessary for implementation of the response action. The Tar Creek Superfund Site is bound on the north by the Kansas state line and includes the communities of Cardin, Commerce, North Miami, Picher, and Quapaw, Oklahoma.

The Catholic 40 is located in Distal Group 8 (Distal 8) of the Tar Creek Superfund Site. Distal 8 represents only a small portion of the overall Tar Creek Superfund Site. Distal 8 includes one (1) chat base (CB011) and one (1) known mine shaft. CB011 is located within the north half of Section 6 Township 28 North (T28N) Range 24 East (R24E), and more specifically, within Ottawa County Parcel 0000-06-028-024-0-001-00 (see Site Location Map in Appendix B). An east-west running property line divides CB011 into two sections: CB011 North on non-restricted fee land and CB011 South on tribal trust land owned by the Quapaw Tribe. CB011 North is not included within the scope of this proposed remedial response. Hereafter, CB011 is named to refer to the CB011 South portion of the chat base. Contaminated mine and mill wastes, also known as source material, in the form of chat, fine tailings, flotation tailings, and development rock, all in varying amounts, have affected both soil and water at the Catholic 40. This proposed remedial response will address only source material and affected transition zone (TZ) soils. The contaminants of concern (COCs) at the Catholic 40 are lead, zinc, and cadmium.

Mining at the Catholic 40 has also impacted surface water quality at the Catholic 40 (i.e. Beaver Creek). Chat-laden surface water runoff from the Catholic 40 has contributed to water quality impairment in Beaver Creek. While mine water discharges to the surface at multiple locations in the Beaver Creek watershed, no mine water discharges have been identified at the Catholic 40.

Ground water quality in the Beaver Creek watershed has also been impacted by mining. Of the two main aquifers in the region, the shallow Boone and the deeper Roubidoux, mining activities were confined to the overlying Boone. Thus, the Boone aquifer is the primary source of subsurface ground water contamination. Once the extensive network of mine workings filled with water, the water became acidic and laden with metals. The underlying Roubidoux aquifer is the principal source of drinking water for the region.

## **B. Culturally and Historically Significant Nature of the Catholic 40 Property**

The Catholic 40 is a culturally and historically significant site to the Quapaw Tribe. Beaver Creek flows along the southwestern boundary of CB011 before flowing through the Tribal Powwow Grounds approximately 0.25 miles downstream of the Catholic 40. Due to the cultural significance of the water body, the Quapaw Tribal Business Committee has designated Beaver Creek as an Outstanding Resource Water (ORW).

The Catholic 40 also contains evidence of important events in the history of the Quapaw Tribe of Oklahoma. During recently undertaken reconnaissance efforts involving QTEO, the Quapaw Tribal Historic Preservation Officer (THPO) and the Bureau of Indian Affairs (BIA) Regional Cultural Preservation Office, several historic structures have been identified along the eastern portion of the site. These historical structures are associated with a Catholic church and school that provided educational opportunities to the Quapaw Tribe of Oklahoma, surrounding tribes, and the community. The church was established on the property in 1893 and the associated school house was constructed in 1894. Buildings were added to the property over a period of years as the number of students increased. The school had both resident and day students and dormitories were constructed to house the resident students. Outbuildings for farm animals and farming equipment also occupied portions of the property. Funding was discontinued and the school closed in 1927. After closure, some wood-frame buildings were removed, while others were allowed to fall into ruins. Mining began at the site in 1936 and mine waste may cover remnants of the historic buildings and other features associated with the church and school.

In order to protect and preserve the history of the Quapaw Tribe, extra precaution will be exercised during the remediation of CB011 in order to protect water quality in Beaver Creek and mitigate the potential for accidental damage or removal of any structures or associated items which may help the Quapaw Tribe come to a better understanding of their history.

## **C. Proposed Site Specific Statement of Work (SOW)**

In order to complete the remediation of the Catholic 40 property, the Tribe anticipates completing the following two major tasks.

### **Task 1: Site Remediation**

The remediation of the Catholic 40 property shall consist of the following subtasks:

1. Preparation of site specific plans and pre-construction submittals, including material submittals, health and safety related certifications, personnel related requirements, site specific work plans, etc.
2. Mobilization, including installation of decontamination facilities, waste containment facilities, scale house, construction trailers etc.

3. Site preparation, including pre-construction site survey, protection and marking of historic features, site clearing, work zone establishment, etc.
4. Repair of southern access road and associated water crossings (justification for repairing and utilizing southern access road is being submitted to EPA under separate cover).
5. Removal, transportation, and disposition of source material, waste materials, and TZ soils, including furnishing and maintaining weight scales and associated facilities.
6. Filling and capping of mine shafts, and cased borings, including cover construction over filled mine shafts.
7. Water management, including collection, containment, and disposal of decontamination water and streambank stabilization.
8. Site restoration, including grading and surveying for verification of grid excavation depth and aerial extent.
9. Decontamination and demobilization, including intermediate decontamination before exiting the exclusion zone, disposal of debris and rinsate, and deconstruct/demobilize all site facilities.
10. Follow-up monitoring of remediated areas and maintenance, as needed, to address inadequacies of the remedy before it becomes operational.

#### **Task 1 Method:**

The Quapaw Tribe will self perform the remediation work on the Catholic 40 site. The Quapaw Tribe employs professional construction managers, project administrators, superintendents, construction coordinators, safety and health professionals, and accountants that specialize in the management of construction projects. Over the past 5 years, the Quapaw Tribe has successfully managed over \$400 million of in place construction projects. The Quapaw Tribe Environmental Office will maintain a consistent management capacity for the Catholic 40 project by retaining an engineering support contractor to provide assistance in development of site-specific plans, generation of remediation documents, and on-site management of remediation activities.

#### **Task 1 Cost Estimate:**

A summary of the estimated costs associated with the completion of Task 1 is included below in Table 1. A more detailed budget breakdown for Task 1 may be found in Appendix C.

**Table 1: Summarized Cost Estimate for Task 1**

<b>Subtask Description</b>	<b>Subtask Cost</b>
Preparation of Site-Specific Plans, Pre-construction Submittals, & Project Engineering Support (performed by engineering consulting firm)	\$135,000
Site Mobilization	\$104,102
Site Preparation	\$151,320
Preparation of Access Road	\$125,580
Removal, Transportation, & Disposal of Source Material & TZ Soils	\$1,528,290
Filling & Capping of Mine Shaft, Cased Borings, and Removal of Asphalt Piles	\$50,200
Water Management and Streambank Stabilization	\$67,770
Confirmation Sampling and Analysis	\$14,550
Decontamination and Demobilization	\$148,850
Follow-Up Monitoring and Maintenance of Pre-Operational Remedy	\$19,000
Health and Safety Incentive	\$26,000
Performance and Payment Bonds (if needed for contracts above \$150,000.00)	\$30,000
<b>TASK 1 TOTAL</b>	<b>\$2,400,662</b>

**Task 1 Planned Schedule/Output:**

The estimated timeline for completing the remediation activity at the Catholic 40 site is approximately 6 months (from mobilization to the site to demobilization). See the detailed project timeline on page 10.

**Task 2: Tribal Project Management**

The QTEO will be responsible for the management of the Cooperative Agreement grant and for general project management and oversight of the Catholic 40 project. Accordingly, the Tribe will have the ultimate authority in ensuring the quality and effectiveness of the remediation. The Tribe anticipates that more time and effort will be required of Tribal staff during the first 12 months of the 2 year project period. Consequently, the percentage of time required for each staff person to complete work plan tasks is as subdivided into Year 1 and Year 2 subcategories.

Below is a list of the primary tasks that the QTEO will undertake in overall project management, followed by a list of QTEO staff and the corresponding percentage of their time that is anticipated to be spent on that task for Year 1 and Year 2 of the project.

- Generation of Requests for Proposals (RFPs): This will include RFPs for the engineering support contractor as well as the remediation contractor that will be assisting the QTEO.

<b>Environmental Director's Time:</b>	<b>Year 1 = 8%</b>	<b>Year 2 = 0%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 7%</b>	<b>Year 2 = 0%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
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- Development and administration of contracts: This will involve negotiating and reviewing contracts, once contractors are selected. The Tribe's attorney will be involved in this process.

<b>Environmental Director's Time:</b>	<b>Year 1 = 2%</b>	<b>Year 2 = 0%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 4%,</b>	<b>Year 2 = 0%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- On-site inspection. This will include having a representative of the Tribe on site whenever work is performed to ensure that work complies with the plans and specifications and that historically significant features are identified and protected. On-site personnel representing the Tribe will be qualified and experienced in inspection of remediation projects and will be familiar enough with the engineering plans and all other project related documents (i.e. QA/QC plans, and Health and Safety Plan, SWPPP, SAP, SOPs, ect) to ensure contractor compliance with the requirements in these documents. On-site personnel shall keep daily logs and take photographs of site activity. It should be noted that there will be Tribal representative, who is trained in the identification of historical features and artifacts, on site during certain phases of the remediation in which there may be a possibility of encountering these artifacts and/or features.

<b>Environmental Director's Time:</b>	<b>Year 1 = 2%</b>	<b>Year 2 = 1%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 2%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 3%</b>	<b>Year 2 = 1%</b>

**Tribal Historic Preservation Specialist: \$9,600** (8 hrs./day for 40 days @ \$30/hr.)

- Scale Operation: A qualified tribal employee will be assigned to man and operate the on-site truck weight scale.

**Tribal Scale Operator: \$12,800** (8 hrs./day for 80 days @ \$20/hr.)

- Task assignment, scheduling, contractor coordination. This will include day-to-day communication with project staff and contractors regarding ongoing and planned activity as well as addressing project related issues as they arise.

<b>Environmental Director's Time:</b>	<b>Year 1 = 3%</b>	<b>Year 2 = 2%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 4%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- Document review. This will include review of submittals from the remediation contractor (progress reports, engineering drawings, work measurement, pay requests, lab results, inspection reports, photographs, etc.).

<b>Environmental Director's Time:</b>	<b>Year 1 = 6%</b>	<b>Year 2 = 5%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 9%,</b>	<b>Year 2 = 2%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- Meetings: QTEO staff will participate in project related meetings including daily tailgate meetings, progress meetings, safety meetings, consultation meetings with EPA, and other meetings as issues arise. This will likely include utilization of the engineering support contractor to represent the Tribe when appropriate QTEO staff persons are unable to attend some meetings.

<b>Environmental Director's Time:</b>	<b>Year 1 = 2%</b>	<b>Year 2 = 1%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 2%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- Coordination/consultation with, and reporting to, EPA: This will include ongoing communications and meetings with EPA's Remedial Project Manager (RPM) assigned to the project; and generating the required quarterly reports.

<b>Environmental Director's Time:</b>	<b>Year 1 = 5%</b>	<b>Year 2 = 5%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 1%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- Outreach to Tribal public: This will include public meetings, newsletter articles, information availability outreach efforts, and reporting to Tribal Business Committee

<b>Environmental Director's Time:</b>	<b>Year 1 = 1%</b>	<b>Year 2 = 2%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 0%,</b>	<b>Year 2 = 3%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 5%</b>	<b>Year 2 = 2%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 1%</b>

- Short-term remedy monitoring: It is anticipated that some monitoring of the Catholic 40 remediation will be required during the grant period to ensure that the remedies are performing as designed before becoming operational.

<b>Environmental Director's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 1%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 0%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 5%</b>	<b>Year 2 = 3%</b>

- Training and travel: It is anticipated that travel and training will likely be required as the grant period progresses. Training is assumed to include 40-hour OSHA HAZWOPER training for Tribal non-contract personnel who will be visiting the site (CERCLA requires

this training for all who enter onto a Superfund work site). It is also assumed that there will be at least 2 Trips to EPA Region 6 offices in Dallas for meetings with EPA staff regarding project progress and other site-related issues.

<b>Environmental Director's Time:</b>	<b>Year 1 = 1%</b>	<b>Year 2 = 1%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 1%,</b>	<b>Year 2 = 1%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 2%</b>	<b>Year 2 = 2%</b>

- Grant administration: This will include, but not limited to, budget tracking, records/document management and storage, and communications with EPA grant administrative staff.

<b>Environmental Director's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 2%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 0%,</b>	<b>Year 2 = 2%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 10%</b>	<b>Year 2 = 8%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 0%</b>	<b>Year 2 = 0%</b>

- Summary of Time and Effort Required:

<b>Environmental Director's Time:</b>	<b>Year 1 = 30%</b>	<b>Year 2 = 20%</b>
<b>Environmental Scientist's Time:</b>	<b>Year 1 = 30%,</b>	<b>Year 2 = 13%</b>
<b>Environmental Grants Manager's Time:</b>	<b>Year 1 = 15%</b>	<b>Year 2 = 10%</b>
<b>Environmental Technician's Time:</b>	<b>Year 1 = 10%</b>	<b>Year 2 = 7%</b>
<b>Tribal Scale Operator: \$12,800</b>		
<b>Tribal Historic Preservation Specialist: \$9,600</b>		

### **Task 2 Method:**

The Tribal project management tasks listed above will be accomplished by utilizing QTEO staff according to their workload. The Tribe's engineering support contractor will be utilized as needed. All time and effort expended in completing these tasks shall be reported in the quarterly reports to EPA.

**Task 2 Cost Estimate:** **\$153,318.00<sup>1</sup>**

**note 1:** Includes personnel costs and fringe benefit costs for Quapaw Tribe staff, travel, training, supplies, and indirect costs (see the detailed budget breakdown attached in Appendix D).

### **Task 2 Planned Schedule/Output:**

It is anticipated that the Tribal project management tasks listed above will be conducted and completed throughout the grant period according to the schedule established by the remediation contractor. All activity related to remediation of the Catholic 40, including Time and Effort (T&E) reports will be included in the Quarterly Reports to EPA.

**Planned Schedule:**

The above-listed activities shall be conducted as needed and as issues arise. General Tar Creek involvement activity will be reported to the EPA in Quarterly Reports. A report on all Superfund activity will be forward to the Tribal Business Committee on a monthly basis.

<b>Task ID #</b>	<b>Task Description</b>	<b>Proposed Begin Date</b>	<b>Proposed End Date</b>	<b>Time Required (Days)</b>	<b>Task Status <sup>1</sup></b>
1	Initial grant award of \$500,000		Oct. 1, 2012	---	Completed
2	Develop Engineering Support RFP	Oct 1, 2013	Oct. 15, 2013	14	Completed
3	Solicit Bids for Engr. Support Contractor	Oct. 16, 2012	Nov. 6, 2012	21	Completed
4	Review Bids for Engr. Support Contractor	Nov. 7, 2012	Nov. 14, 2012	7	Completed
5	Select Engr. Support Contractor		Dec. 1, 2012	---	Completed
6	Development of Site-Specific Plans (Health & Safety, Community Relations, QAPPs, etc.)	April 15, 2013	October 7 , 2013	31	Pending
7	Pre-Construction Meeting		October 21, 2013	---	Pending
8	Mobilization and Site Preparation		October 21, 2013		Pending
9	Source Material Removal	October 22, 2013	February 18, 2014	120	Pending
10	Site Restoration	Feb 19, 2014	March 14, 2014	30	Pending
11	Post-Construction Mtg/ Final Walkthrough		March 14, 2014	---	Pending
12	Decontamination and Demobilization	March 17, 2014	March 28, 2014	14	Pending
13	Remedy Monitoring (revegetation, filled shaft, etc.)	March 31, 2014	Sep 30, 2014	180	Pending
14	Develop and Finalize Remedial Action Report	Oct 1, 2014	Dec 30, 2014	120	Pending
15	Finalize Grant Close-Out	Jan 1, 2015	May 31, 2015	150	Pending

<sup>1</sup> Tasks identified as “Completed” have been completed as of 12/21/2012 with funds from the initial grant award of \$500,000 for “administrative purposes”. The timeline for successful completion of Tasks identified as “Pending” are subject to EPA’s approval of this revised workplan and budget and subsequent review of Site Specific Plans.

#### **D. Designation of Lead Site Project Manager**

The lead site project manager for the Catholic 40 remediation will be Mr. Tim Kent, PG Environmental Director of the Quapaw Tribe Environmental Office (QTEO). The QTEO has coordinated with other Tribal departments including, but not limited to, Quapaw Services Authority (QSA), the Tribal Realty Department, and the Tribal Historic Preservation Department (THPO) in the process of planning the proposed remedial response activities.

#### **E. Community Relations Plan**

A draft site-specific Community Relations Plan (CRP) has been developed by the Quapaw Tribe, in accordance with 40 CFR Part 35 Subpart O, Section 35.6105(a)(2)(iv). The Tribe will prepare Fact Sheets for Tribal members, host informational meetings, and post a sign at the site to inform the public about what is happening and where to call if they see any criminal activity or trespassing on the site. The Quapaw Tribe of Oklahoma will comply with the community relations requirements described in EPA policy and guidance, and in the National Contingency Plan. The CRP will be finalized and reviewed by EPA before initiation of the RA.

#### **F. Health and Safety Plan**

A site-specific Health and Safety Plan (HSP) will be developed by the Quapaw Tribe and submitted to EPA Region VI before field activities begin, in accordance with 40 CFR Part 35 Subpart O, Section 35.6105(a)(2)(v). The HSP will ensure the protection of on-site personnel and area residents. The schedule for the development and finalization of the HSP is included in the proposed project timeline in Section 2.C.

#### **G. Quality Assurance**

The QTEO is well aware of EPA’s unwavering commitment to Quality Assurance and Quality Control (QA/QC). The QTEO is equally committed to the generation of sound, scientific, quality assured data along with the successful completion of quality projects. The QTEO is currently administering five (5) EPA grants under an existing EPA-approved Quality Management Plan (QMP). All remedial activities for the proposed project will comply with the existing Site-wide Quality Assurance Plan developed for EPA by CH2M Hill. The Quapaw Tribe has developed site-specific QA/QC Plans for both sampling and analysis and for excavation/construction.. Quality Assurance Project Plans (QAPPs) have also been developed for all proposed data collection activities associated with successful completion of the project. All QAPPs and QA/QC Plans will be submitted to, and approved by, EPA Region VI before field activities begin.

## **H. Project Deliverables**

Project deliverables will be both administrative and technical in nature. The administrative/grant deliverables will include 1) quarterly reporting to the EPA-designated Project Officer on the progress made toward individual workplan tasks along with financial updates, 2) a final report documenting the successful completion of all workplan tasks, and 3) all other certifications and grant forms typically required to successfully administer and close-out an EPA grant (i.e. FSR, MBE/WBE, etc.) The technical/remediation deliverables will include 1) weekly conference calls with the EPA-designated Remedial Project Manager (RPM) to report on the progress made in planning, implementing, and finishing the proposed remedial project, 2) a final walk through with EPA staff and Tribal representatives prior to project close-out, and 3) a remedial action report upon project close-out. The target dates for these project deliverables are incorporated into the proposed project timeline in Section 2.C.

## **III. CERCLA ASSURANCES**

### **A. Operation and Maintenance**

The Quapaw Tribe of Oklahoma will assume responsibility for all future operation and maintenance of the CERCLA-funded remedial action at the Catholic 40 for the expected life of the action as required by CERCLA Section 104(c).

### **B. Cost Sharing**

The Quapaw Tribe of Oklahoma will not share in the cost of the CERCLA-funded remedial action at the Catholic 40 as Indian Tribes are not required to share in such costs according to 40 CFR Part 35 Subpart O, Section 35.6110(b)(3).

### **C. Twenty-Year Waste Capacity of Off-Site Disposal Location**

A relatively small amount of source material will be disposed of on-site in an open mine shaft at the Catholic 40. Otherwise, all remaining source other material and TZ soils will be disposed of off-site at the EPA-approved OU4 Chat Repository located at the Central Mill Tailings Pond on E. 40 Rd. in Picher, OK or at an approved chat processor's site. The repository is located on non-restricted fee land and is operated by EPA and its contractors. This repository has been receiving source material and TZ soils from other Distal Group remediation projects since 2009. This repository has more than adequate capacity to securely receive and dispose of all source material and TZ soils associated with the remediation of the Catholic 40.

### **D. Notification of out-of-an-area-of-Indian-Country transfer of CERCLA Waste**

The Quapaw Tribe of Oklahoma will provide the Oklahoma Department of Environmental Quality (ODEQ) with written notification of off-site shipments of CERCLA waste from the

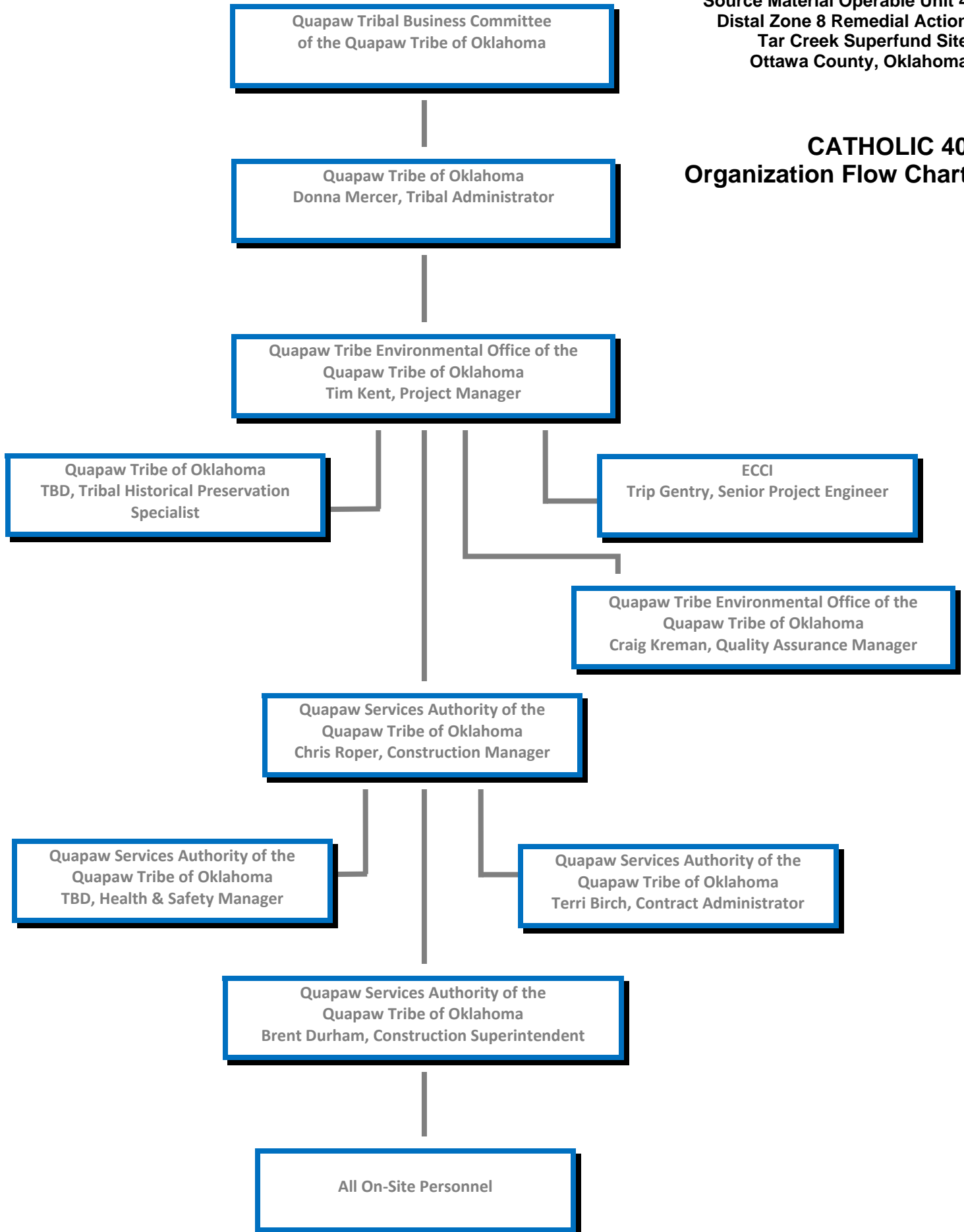
Catholic 40 (tribal trust land) to the OU4 Chat Repository (non-restricted fee land), or at an approved chat processor's site, according to the requirements of 40 CFR Part 35 Subpart O, Section 35.6120.

#### **IV. BUDGET NARRATIVE**

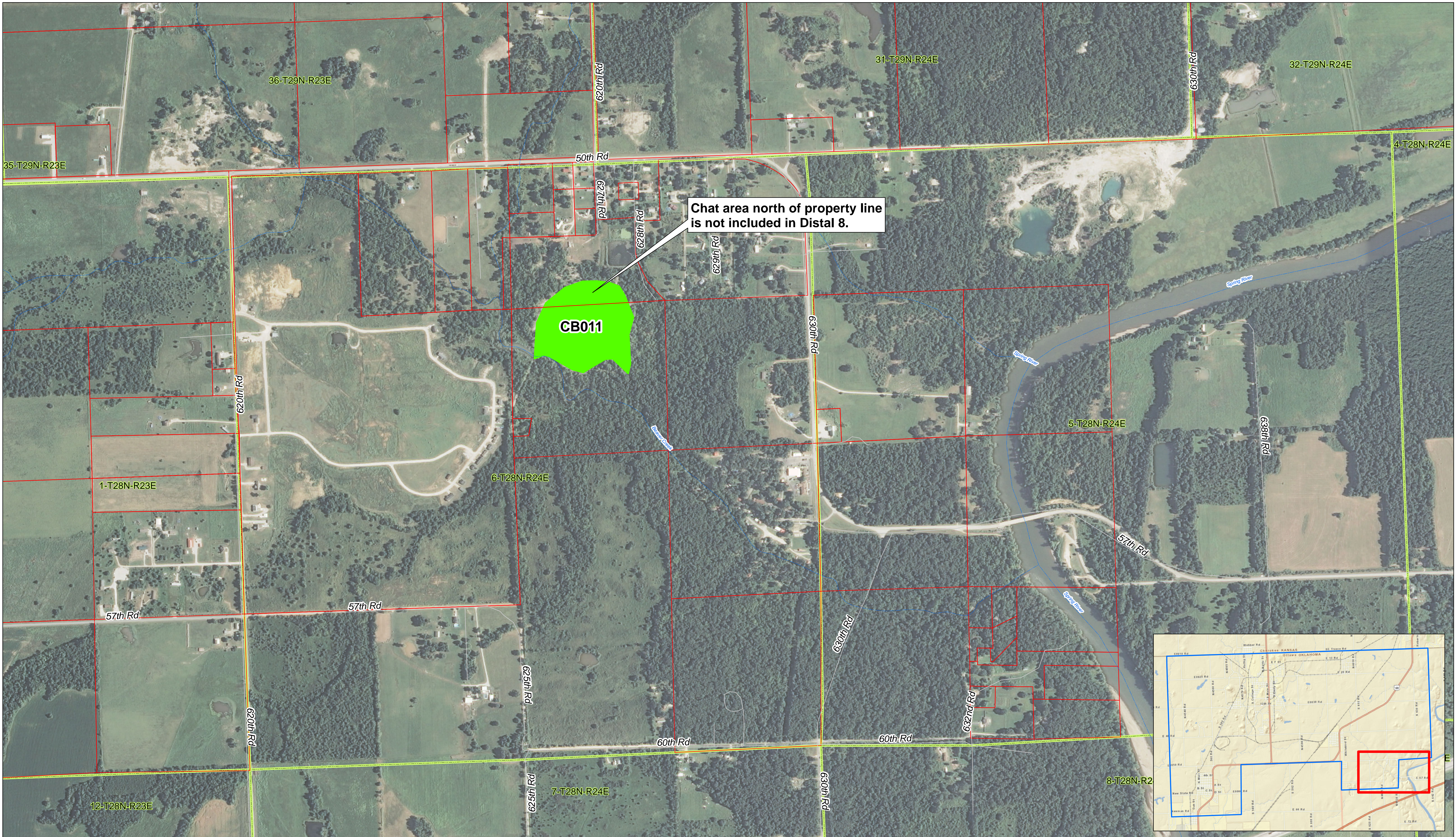
See detailed budget breakdowns attached as Appendix C and Appendix D.

**Appendix A**  
**QTEO Organizational Chart**

## CATHOLIC 40 Organization Flow Chart

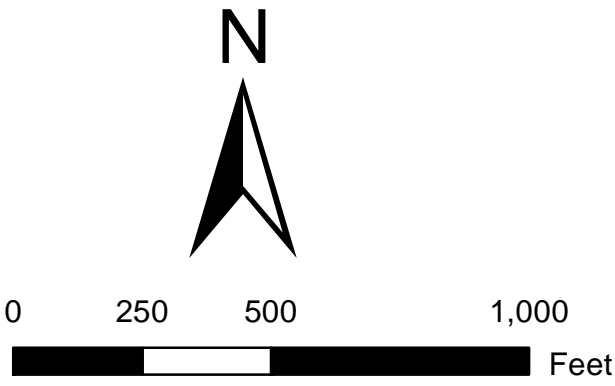


**Appendix B**  
**Distal 8 Site Location Map**



**Legend**

- Chat Bases
- Section
- Property Boundaries
- Road
- Creek



**FIGURE 1**  
**Distal 8 Location Map**  
*Tar Creek Superfund Site*  
*Operable Unit No. 4*  
*Ottawa County, Oklahoma*

**Appendix C**

**Detailed Construction  
Budget Spreadsheet**

Line Items		Quantities	Unit	Unit Price	Subtotal
1	Preparation of Site-Specific Plans, Pre-construction Submittals, and Project Engineering Support				
	a. Site Work Plan	1	PLAN	\$12,500.00	\$12,500.00
	b. Field Sampling and Analysis Plan	1	PLAN	\$7,500.00	\$7,500.00
	c. QA Project Plan	1	PLAN	\$7,500.00	\$7,500.00
	d. Site Management Plan	1	PLAN	\$7,500.00	\$7,500.00
	e. Stormwater Pollution Prevention Plan	1	PLAN	\$7,500.00	\$7,500.00
	f. Construction Quality Assurance Plan	1	PLAN	\$7,500.00	\$7,500.00
	g. Transportation Plan	1	PLAN	\$5,000.00	\$5,000.00
	h. Disposition Plan	1	PLAN	\$5,000.00	\$5,000.00
	i. Mine Shaft Closure Plan	1	PLAN	\$10,000.00	\$10,000.00
	j. Closed Boring Abandonment Procedures	1	PLAN	\$2,500.00	\$2,500.00
	k. Site Health and Safety Plan - QTEO	1	PLAN	\$5,000.00	\$5,000.00
	l. Site Health and Safety Plan - Engineer/Construction Manager	1	PLAN	\$5,000.00	\$5,000.00
	m. Site Health and Safety Plan - Contractor	1	PLAN	\$5,000.00	\$5,000.00
	n. Waste Management Plan	1	PLAN	\$2,500.00	\$2,500.00
	o. Spill Response Plan	1	PLAN	\$2,500.00	\$2,500.00
	p. Develop RFP	1	RFP	\$3,500.00	\$3,500.00
	q. Evaluate Proposals and Develop Contract	1	CONTRACT	\$7,500.00	\$7,500.00
	r. Develop Community Relation Plan	1	PLAN	\$3,000.00	\$3,000.00
	s. Review Pre-Construction Submittals	1	REVIEW	\$1,800.00	\$1,800.00
	t. Pre-Construction Meeting in Quapaw, OK	1	MEETING	\$2,400.00	\$2,400.00
	u. Third Party - ID Utilities	1	REPORT	\$1,500.00	\$1,500.00
	v. Engage Oklahoma Surveyor to Shoot Boundaries and Mark Work Areas	1	SURVEY	\$17,500.00	\$17,500.00
	w. Develop Remedial Action Report	1	REPORT	\$5,300.00	\$5,300.00
Line Item 1 Subtotal					\$135,000.00
2	Site Mobilization				
	a. Office Trailer w/ Utilities	6	MONTHS	\$2,145.00	\$12,870.00
	b. Portable Toilets × 3	6	MONTHS	\$312.00	\$1,872.00
	c. Portable Truck Scales	6	MONTHS	\$3,900.00	\$23,400.00
	d. Portable Truck Scales, Building w/ Utilities	6	MONTHS	\$1,980.00	\$11,880.00
	e. Safety/Zone Fencing, Signage & Barricades	1	LUMP SUM	\$6,240.00	\$6,240.00
	f. Lighted Traffic Boards × 2	6	MONTHS	\$2,340.00	\$14,040.00
	g. 25K lb Excavator	1	DELIVERY	\$1,560.00	\$1,560.00
	h. 100K lb Excavator	1	DELIVERY	\$3,250.00	\$3,250.00
	i. 30 Ton Off Road Truck	1	DELIVERY	\$3,250.00	\$3,250.00
	j. 40 Ton Off Road Truck	1	DELIVERY	\$3,250.00	\$3,250.00
	k. 18 cy Scraper	1	DELIVERY	\$3,250.00	\$3,250.00
	l. 21 cy Scraper	1	DELIVERY	\$3,250.00	\$3,250.00
	m. 7.25 cy Wheel Loader	1	DELIVERY	\$3,250.00	\$3,250.00
	n. Motor Grader	1	DELIVERY	\$3,250.00	\$3,250.00
	o. 25K lb Dozer	1	DELIVERY	\$1,560.00	\$1,560.00
	p. 80K lb Dozer	1	DELIVERY	\$3,250.00	\$3,250.00
	q. Skid Steer w/Sweeper Att.	1	DELIVERY	\$1,560.00	\$1,560.00
	r. Rubber Tire Backhoe w/ Forks Att.	1	DELIVERY	\$1,560.00	\$1,560.00
	s. Trencher	1	DELIVERY	\$1,560.00	\$1,560.00
Line Item 2 Subtotal					\$104,102.00

Line Items		Quantities	Unit	Unit Price	Subtotal
<b>3 Site Preparation</b>					
	a. Install Protective Fencing	1000	LF	\$6.50	\$6,500.00
	b. Clearing & Grubbing	5	ACRE	\$11,050.00	\$55,250.00
	c. Zone Establishments	1	LUMP SUM	\$7,020.00	\$7,020.00
	d. Prep Site, Set Office & Utilities	1	LUMP SUM	\$15,600.00	\$15,600.00
	e. Materials for Office (Sb-2 Gravel, Stairs, Misc.)	1	LUMP SUM	\$10,400.00	\$10,400.00
	f. Prep Site Scales, Office & Utilities	1	LUMP SUM	\$27,300.00	\$27,300.00
	g. Materials for Scales (Sb-2 Gravel, Concrete, Misc.)	1	LUMP SUM	\$15,600.00	\$15,600.00
	h. Traffic Controls	1	LUMP SUM	\$4,550.00	\$4,550.00
	i. Utility Locates and Drawing Prep (Subcontracted)	1	LUMP SUM	\$4,550.00	\$4,550.00
	j. Install Decontamination Zone	1	LUMP SUM	\$4,550.00	\$4,550.00
Line Item 3 Subtotal					\$151,320.00
<b>4 Construction of Temporary Access Road</b>					
<b>Southern Access 2308' × 26'</b>					
	a. Excavation and Embankment	970	CY	\$9.10	\$8,827.00
	b. Borrow	48.5	CY	\$14.00	\$679.00
	c. Geogrid for Pavement (Complete in Place)	1290	SY	\$5.60	\$7,224.00
	d. Base Course for Haul Road (for Repairs)	950	TONS	\$35.00	\$33,250.00
	e. R.C. Pipe (Class III) Culvert (Two Stream Crossings)	200	LF	\$91.00	\$18,200.00
	f. Seeding	2	AC	\$2,330.00	\$4,660.00
	g. Mulch Cover	2	AC	\$3,500.00	\$7,000.00
	h. Site Preparation (incl. Mobilization)	1	LS	\$32,660.00	\$32,660.00
	i. Trench and Excavation Safety Systems	1	LS	\$3,270.00	\$3,270.00
	j. Erosion Control & Maintenance	1	LS	\$6,540.00	\$6,540.00
	k. Roadway Construction Control	1	LS	\$3,270.00	\$3,270.00
Temporary Access Road Subtotal					\$125,580.00
<b>5 Removal, Transportation, and Disposal of Source Material, Waste Material, and TZ Soils</b>					
	a. Engineering Support During Remediation	1	SUPPORT	\$21,000.00	\$21,000.00
	b. On Site Engineering Construction Manager During Remediation Activities	80	DAYS	\$953.00	\$76,240.00
	c. Engineering Contractor Project Meetings with Quawpaw Tribe	6	MEETING	\$1,550.00	\$9,300.00
	d. Engineering Contractor Project Meetings with EPA Region 6 in Dallas, TX	2	MEETING	\$1,400.00	\$2,800.00
	e. Water Truck and Water for Dust Control	100	DAYS	\$1,436.50	\$143,650.00
	f. Removal and Transportation of Source Material to Repository	106700	TONS	\$11.00	\$1,173,700.00
	g. Excavate by Hand w/ Equipment Support	300	TONS	\$130.00	\$39,000.00
	h. 20 cy Roll Off Containers, Waste Material X2	50	DAYS	\$650.00	\$32,500.00
	i. Survey and Layout - BIA Certified Surveyor	20	DAYS	\$1,105.00	\$22,100.00
	j. Construction Fencing and Barricade Replacement	2000	LF	\$4.00	\$8,000.00
Line Item 5 Subtotal					\$1,528,290.00
<b>6 Filling and Capping of Mine Shafts, Cased Borings, and Removal of Asphalt Piles</b>					
	a. Mine Shaft Filling, Adjustable per Site Conditions ea.	1	LUMP SUM	\$19,500.00	\$19,500.00
	b. Subsidence Features, Filling per Site Conditions ea.	1	LUMP SUM	\$15,000.00	\$15,000.00
	c. Cased Borings	1	LUMP SUM	\$12,000.00	\$12,000.00
	d. Remove Waste Asphalt Piles	185	TONS	\$20.00	\$3,700.00
Line Item 6 Subtotal					\$50,200.00

Line Items			Quantities	Unit	Unit Price	Subtotal
7	Water Management					
	a.	Silt Curtain	2200	LF	\$6.00	\$13,200.00
	b.	Hay Bales	642	BALES	\$10.00	\$6,420.00
	c.	Rock Ditch Checks	520	TONS	\$20.00	\$10,400.00
	d.	Rip Rap	35	TONS	\$50.00	\$1,750.00
	e.	Gabion Buckets	10	BUCKETS	\$200.00	\$2,000.00
	f.	Initial Installation an management of SWPPP	1	LS	\$30,000.00	\$30,000.00
	g.	Maintenance of Erosion Control	1	LS	\$4,000.00	\$4,000.00
	h.	20k gl. Frac Tanks, Stormwater Collection × 2	50	DAYS	\$2,340.00	\$117,000.00
	i.	Double Bag, 10 Micron & 25 Micron Water Filter	50	DAYS	\$3,185.00	\$159,250.00
	j.	Storm Water Pumping and Handling	50	DAYS	\$1,820.00	\$91,000.00
Line Item 7 Subtotal						\$67,770.00
8	Sampling and Analyses					
	a.	Field Sampling, Compositing, Sieving	5	EVENT	\$1,494.00	\$7,470.00
	b.	Analytical (10 day TAT)	48	SAMPLES	\$97.50	\$4,680.00
	c.	Analytical (3 day TAT)	8	SAMPLES	\$150.00	\$1,200.00
	d.	Level IV Data Package	12	REPORT	\$100.00	\$1,200.00
Line Item 8 Subtotal						\$14,550.00
9	Site Restoration					
	a.	Post Construction Final Site Review	1	REVIEW	\$1,550.00	\$1,550.00
	b.	Develop Remedial Action Report	1	REPORT	\$5,300.00	\$5,300.00
	c.	Topographic Survey of Grids by BIA Certified Surveyor	14	GRIDS	\$1,105.00	\$15,470.00
	d	Soil Amendments & Hydromulching	14	GRIDS	\$1,300.00	\$18,200.00
	e.	Maintain Grid to 70% Cover	14	GRIDS	\$2,600.00	\$36,400.00
Line Item 9 Subtotal					see footnote 1	(\$22,320.00)
10	Decontamination and Demobilization					
	a.	Decon & Demobilize Scales	1	LUMP SUM	\$22,100.00	\$22,100.00
	b.	Decon & Demobilize Heavy Equipment	1	LUMP SUM	\$109,850.00	\$109,850.00
	c.	Decon & Demobilize Office	1	LUMP SUM	\$7,800.00	\$7,800.00
	d.	Decon & Demobilize Water Equip.	1	LUMP SUM	\$4,550.00	\$4,550.00
	e.	Decon & Demobilize Roll Off Boxes	1	LUMP SUM	\$4,550.00	\$4,550.00
Line Item 10 Subtotal						\$148,850.00

Line Items			Quantities	Unit	Unit Price	Subtotal
11	Pret-Operational Follow-Up Construction					
	a.	Maintenance of Capped Mine Shaft Until Final Acceptance of Remedial Action				\$11,000.00
	b.	Maintenance of Vegetative Cover Until Final Acceptance of Remedial Action				\$6,000.00
	c.	Repair of Erosion Controls Until Final Acceptance of Remedial Action				\$2,000.00
Line Item 11 Subtotal						\$19,000.00
12	Health and Safety Incentive					
	a.	Health and Safety Incentive				\$26,000.00
Line Item 12 Subtotal						\$26,000.00
13	Performance and Payment Bond					
	a.	Performance and Payment Bond				\$30,000.00
Line Item 13 Subtotal						\$30,000.00
Total Costs						\$2,400,662.00

<sup>1</sup> Section 9 subtotal was not included in the \$2,400,662.99 " Total Costs". As per EPA request, Site Restoration cost is absorbed under Section 5.

**Appendix D**

**Superfund Remedial Response Budget**

# **SUPERFUND REMEDIAL RESPONSE BUDGET**

## **(Catholic 40 Clean-Up)**

*Revised 10-08-13*

**October 1, 2012 - September 30, 2014**

### **PERSONNEL FOR YEAR 1:**

**\$79,187.00**

Env. Director	\$88,558 @ 0.30 FTE x 12 months	\$26,567.00
Env. Scientist	\$63,000 @ 0.30 FTE x 12 months	\$18,900.00
Env. Grants Manager	\$56,264 @ 0.15 FTE x 12 months	\$8,440.00
Env. Technician	\$28,802 @ 0.10 FTE x 12 months	\$2,880.00
Scale Operator	(8 hr./day, 80 days @ \$20/hr., fringe included)	\$12,800.00
Historic Preservation Spec.	(8 hr./day, 40 days @ \$30/hr., fringe included)	\$9,600.00

### **PERSONNEL FOR YEAR 2:**

**\$33,544.00**

Env. Director	\$88,558 @ 0.20 FTE x 12 months	\$17,712.00
Env. Scientist	\$63,000 @ 0.13 FTE x 12 months	\$8,190.00
Env. Grants Manager	\$56,264 @ 0.10 FTE x 12 months	\$5,626.00
Env. Technician	\$28,802 @ 0.07 FTE x 12 months	\$2,016.00

### **TOTAL PERSONNEL:**

**\$112,731.00**

### **FRINGE BENEFITS:**

**\$32,947.00**

The fringe benefits of the Quapaw Tribe of Oklahoma are broken down as follows:

FICA-S	6.200%	
FICA-M	1.450%	
SUTA	6.700%	
Worker's Comp	<u>0.005%</u>	
	14.355% x \$90,330	= \$12,967.00
401(k) Contribution		
	\$800/yr per employee x 1.35 FTE x 2 years	= \$2,160.00
Health, Dental, Vision & Life Insurance		
	\$6,600/yr per employee x 1.35 FTE x 2 years	= \$17,820.00

### **TRAVEL:**

**\$2,140.00**

Per Diem/Meals	
	(\$71 per day) x (2 days) x (2 trips) x (2 persons) \$568.00
Hotels/Lodging	
	(\$113 per night) x (1 nights) x (2 trips) x (2 persons) \$452.00
Air Fare	
	(\$200 per trip) x (2 trips) x (2 persons) \$800.00
Taxi/Tolls/Parking	
	(\$50 per trip) x (2 trips) \$100.00

POV Mileage  
(\$110 per trip) x (2 trips) \$220.00

Travel may be necessary for the staff to complete their deliverables. Assuming two (2) trips for two (2) Tribal staff members to Dallas, TX for one day meetings with EPA Region 6 staff.

<b>SUPPLIES:</b>	<b>\$5,500.00</b>
Office Supplies (\$150.00/ month) x (24 months)	\$3,600.00
Personal Protective Equipment (Boots, Hardhats, etc.)	\$1,000.00
Project Management Software	\$900.00
<b>CONSTRUCTION COST:</b> (not subject to indirect cost)	<b>\$2,400,662.00</b>
Includes cost for services rendered by engineering support contractor and Tribal construction division (see attached spreadsheet for itemized construction costs).	
<b>SUBTOTAL:</b>	<b>\$2,553,980.00</b>
<b>CONSTRUCTION COST- NOT SUBJECT TO INDIRECT COST</b>	<b>\$2,400,662.00</b>
<b>NON-CONTRACTUAL- SUBJECT TO INDIRECT COST</b>	<b>\$153,318.00</b>
<b>INDIRECT COST @ 53.42% IDC RATE</b>	<b>\$81,902.00</b>
<b>TOTAL:</b>	<b>\$2,635,882.00</b>